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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/871,415	05/30/2001	Stephen G. Perlman	50588/356	9275

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EXAMINER

MOORTHY, ARAVIND K

ART UNIT	PAPER NUMBER
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2131

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/871,415	PERLMAN, STEPHEN G.	
	Examiner	Art Unit	
	Aravind K. Moorthy	2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 29,31-41,43-45 and 56-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 29,31-41,43-45 and 56-60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>see attachment</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is in response to the communications filed on 7 March 2007.
2. Claims 29, 31-41, 43-45 and 56-60 are pending in the application.
3. Claims 29, 31-41, 43-45 and 56-60 have been rejected.
4. Claims 1-28, 30, 42 and 46-55 have been cancelled.

Response to Amendment

5. The examiner approves of the amendment made to claims 29 and 31-40. However, the amendment does not overcome the rejection under 35 U.S.C. 101. The specification does not distinguish between storage and propagation media. The examiner suggests an amendment to the specification. The examiner suggests "The machine-readable medium may include, but is not limited to storage media such as floppy diskettes, optical disks, CD-ROMs, and magneto-optical disks, ROMs, RAMs, EPROMs, EEPROMs, magnet or optical cards or propagation media or other type of media/machine-readable medium suitable for storing electronic instructions" for page 43, lines 16-20.

Response to Arguments

6. Applicant's arguments with respect to claims 29, 31-41, 43-45 and 56-60 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 29 and 31-40 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 29 and 31-40 are directed towards a machine-readable medium having program code stored thereon which, when executed by a processor, are caused to perform a set of operations. The examiner refers the applicant to the specification (page 43, lines 16 and 19). The applicant claims the machine-readable medium as propagation media. When nonfunctional descriptive material is recorded on some computer-readable medium, in a computer or on an electromagnetic carrier signal, it is not statutory since no requisite functionality is present to satisfy the practical application requirement. Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored in a computer-readable medium, in a computer, on an electromagnetic carrier signal does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because "[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer."). Such a result would exalt form over substance. In *re Sarkar*, 588 F.2d 1330, 1333, 200 USPQ 132, 137 (CCPA 1978) ("[E]ach invention must be evaluated as claimed; yet semantogenic considerations preclude a determination based solely on words appearing in the claims. In the final analysis under Sec. 101, the claimed invention, as a whole, must be evaluated for what it is.") (quoted with approval in *Abele*, 684 F.2d at 907, 214 USPQ at 687).

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 41-45 and 57-60 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Independent claim 41 has been amended to include the limitation “original multimedia streams”. After a careful review of the original specification, the examiner finds no support for the amendment.

Independent claim 57 has been amended to include the limitation “original channels”. After a careful review of the original specification, the examiner finds no support for the amendment.

Independent claim 58 has been amended to include the limitation “original set of channels”. After a careful review of the original specification, the examiner finds no support for the amendment.

Any claims not directly addressed are rejected on its virtue of dependency.

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9. Claims 41-45 and 57-60 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The applicant has not defined what makes multimedia streams, channels or set of channels "original".

Claim Objections

10. Claims 29, 31-41, 43-45 and 56-60 are objected to because of the following informalities: vague term.

Independent claims 29, 41 and 56-58 claim a "new" multimedia receiver. However, it is unclear to the examiner what makes a multimedia receiver "new". For example, is the multimedia receiver "new" when it first comes from the factor, upgraded model or being used for the first time?

Any claims not directly addressed are objected to on the virtue of their dependency.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 29, 31, 32, 36-41, 43, 44 and 56-60 are rejected under 35 U.S.C. 102(b) as being anticipated by Bock et al U.S. Patent No. 5,953,418.

As to claims 29 and 56, Bock et al discloses a computer-implemented method for processing multimedia channels comprising:

encrypting a first group of unencrypted multimedia channels using conditional access (“CA”) encryption to produce a first group of encrypted multimedia channels [column 7, lines 3-11],

encrypting the first group of unencrypted multimedia channels using a different type of encryption to produce a second group of encrypted multimedia channels [column 7, lines 3-11]; and

simulcasting the first group of encrypted multimedia channels simultaneously with the second group of encrypted multimedia channels to a plurality of multimedia subscribers having either a new multimedia receiver or a legacy multimedia receiver [column 12 line 57 to column 13 line 15], the second group of encrypted multimedia channels being decryptable by the new multimedia receivers and the first group of encrypted multimedia channels being decryptable by the legacy multimedia receivers [column 20, lines 38-51].

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As to claim 42, Bock et al discloses that the first type of encryption is standard conditional access ("CA") encryption [column 7, lines 3-11].

As to claims 31 and 43, Bock et al discloses that the different type of encryption is digital video broadcast ("DVB") encryption [column 7, lines 3-11].

As to claim 32, Bock et al discloses that the first group of unencrypted multimedia channels are subscription based channels [column 4, lines 15-27].

As to claim 36, Bock et al discloses that the method further comprises:

transmitting a second group of unencrypted multimedia channels in an unencrypted format [column 7, lines 3-11].

As to claim 37, Bock et al discloses that the second group of unencrypted multimedia channels are basic cable channels and the first group of unencrypted multimedia channels are subscription-based cable channels [column 4, lines 15-27].

As to claim 38, Bock et al discloses that the method further comprises:

encrypting a first subset of the basic cable channels using the first type of encryption to produce a first group of encrypted basic cable channels [column 7, lines 3-11];

encrypting the first subset of the basic cable channels using the different type of encryption to produce a second group of encrypted basic cable channels [column 7, lines 3-11]; and

concurrently transmitting the first group of encrypted basic cable channels with the second group of encrypted basic cable channels to the plurality of multimedia subscribers [column 12 line 57 to column 13 line 15].

As to claim 39, Bock et al discloses that the method further comprises:

transmitting a second subset of the basic cable channels in an unencrypted format [column 7, lines 3-11].

As to claim 40, Bock et al discloses that the method further comprises:

regularly transferring channels from the first subset of basic cable channels to the second subset of basic cable channels and channels from the second subset of basic cable to the first subset of basic cable channels [column 10, lines 28-48-].

As to claim 41, Bock et al discloses a headend system for processing multimedia streams comprising:

a first encryption module to encrypt a plurality of original multimedia streams using conditional access ("CA") encryption [column 7, lines 3-11]; and

a second encryption module to encrypt the plurality of original multimedia streams using a different type of encryption [column 7, lines 3-11]; and

a quadrature amplitude modulation module to modulate the plurality of original multimedia streams encrypted in both CA encryption and the different type of encryption for transmission to a plurality of multimedia subscribers at the same time [column 12 line 57 to column 13 line 15], the plurality of multimedia subscribers having either a new multimedia receiver or a legacy multimedia receiver, each new multimedia receiver being capable of decrypting the plurality of original multimedia channels encrypted in the different type of encryption and each legacy multimedia receiver being capable of decrypting the plurality of

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original multimedia channels encrypted in the CA encryption [column 20, lines 38-51].

As to claim 44, Bock et al discloses that the plurality of original multimedia streams are premium cable channels [column 4, lines 15-27].

As to claim 57, Bock et al discloses a system comprising:

means for encrypting original channels using both conditional access (“CA”) encryption and a different form of encryption [column 7, lines 3-11]; and

means for simulcasting the original channels encrypted in both CA encryption and the different form of encryption to subscribers simultaneously [column 12 line 57 to column 13 line 15] the subscribers having either a new multimedia receiver or a legacy multimedia receiver, the original channels encrypted using the different form of encryption being decryptable by the new multimedia receivers and the original channels encrypted using the CA encryption being decryptable by the legacy multimedia receivers [column 20, lines 38-51].

As to claim 58, Bock et al discloses a method for deploying new multimedia receivers comprising:

encrypting an original set of channels using a first type of encryption [column 7, lines 3-11]

encrypting the original set of channels using a second type of encryption [column 7, lines 3-11] and

simultaneously broadcasting the encrypted set of channels that have been respectively encrypted in the first type of encryption and the second type of

encryption to subscribers having either a new multimedia receiver or a legacy multimedia receiver [column 12 line 57 to column 13 line 15]

the channels encrypted using the second type of encryption being decryptable by the new multimedia receivers and the channels encrypted using the first type of encryption being decryptable by the legacy multimedia receivers [column 20, lines 38-51]

As to claim 59, Bock et al discloses transmitting a specified group of channels using no encryption [column 7, lines 3-11]

As to claim 60, Bock et al discloses that the specified group of channels comprise basic cable channels and the original set of channels comprise premium channels [column 4, lines 15-27].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bock et al U.S. Patent No. 5,953,418 as applied to claims 1, 13 and 29 above, and further in view of Traw et al U.S. Patent No. 6,542,610 B2.

As to claims 33-35, Bock et al does not teach that the method further comprises compressing the first group of encrypted multimedia channels using a first compression type and the second group of encrypted multimedia channels using a second compression type. Bock et al

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does not teach that the first compression type is MPEG-2. Bock et al does not teach that the second compression type is MPEG-4. Bock et al does not teach a first decompression module to decompress one or more of the first plurality of multimedia streams previously compressed by content providers using the first compression type and to transmit the one or more multimedia streams to the second compression module for re-compression using the second compression type.

Traw et al teaches compressing a first group of encrypted multimedia channels using a first compression type and the second group of encrypted multimedia channels using a second compression type. Traw et al teaches that the first compression type is MPEG-2. Traw et al teaches that the second compression type is MPEG-4. Traw et al teaches a first decompression module to decompress one or more of the first plurality of multimedia streams previously compressed by content providers using the first compression type and to transmit the one or more multimedia streams to the second compression module for re-compression using the second compression type [column 4, lines 3-65].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Bock et al so that the method further comprised compressing the first group of encrypted multimedia channels using a first compression type and the second group of encrypted multimedia channels using a second compression type. The first compression type would have been MPEG-2. The second compression type would have been MPEG-4. There would have been a first decompression module to decompress one or more of the first plurality of multimedia streams previously compressed by content providers using the

first compression type and to transmit the one or more multimedia streams to the second compression module for re-compression using the second compression type.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Bock et al by the teaching of Traw et al because using compression types of MPEG-2 and MPEG-4 provides good broadcast quality and provides low bandwidth video [column 4, lines 3-7].

13. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bock et al U.S. Patent No. 5,953,418 as applied to claim 41 above, and further in view of Traw et al U.S. Patent No. 6,542,610 B2.

As to claim 45, Bock et al does not teach that the method further comprises compressing the first group of encrypted multimedia channels using a first compression type and the second group of encrypted multimedia channels using a second compression type. Bock et al does not teach that the first compression type is MPEG-2. Bock et al does not teach that the second compression type is MPEG-4. Bock et al does not teach a first decompression module to decompress one or more of the first plurality of multimedia streams previously compressed by content providers using the first compression type and to transmit the one or more multimedia streams to the second compression module for re-compression using the second compression type.

Traw et al teaches compressing a first group of encrypted multimedia channels using a first compression type and the second group of encrypted multimedia channels using a second compression type. Traw et al teaches that the first compression type is MPEG-2. Traw et al teaches that the second compression type is MPEG-4. Traw et al teaches a first decompression

module to decompress one or more of the first plurality of multimedia streams previously compressed by content providers using the first compression type and to transmit the one or more multimedia streams to the second compression module for re-compression using the second compression type [column 4, lines 3-65].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Bock et al so that the method further comprised compressing the first group of encrypted multimedia channels using a first compression type and the second group of encrypted multimedia channels using a second compression type. The first compression type would have been MPEG-2. The second compression type would have been MPEG-4. There would have been a first decompression module to decompress one or more of the first plurality of multimedia streams previously compressed by content providers using the first compression type and to transmit the one or more multimedia streams to the second compression module for re-compression using the second compression type.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Bock et al by the teaching of Traw et al because using compression types of MPEG-2 and MPEG-4 provides good broadcast quality and provides low bandwidth video [column 4, lines 3-7].

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

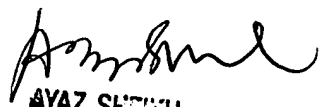
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aravind K. Moorthy whose telephone number is 571-272-3793. The examiner can normally be reached on Monday-Friday, 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Aravind K Moorthy 
March 15 2007


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